The Veterinary Record.

(Founded by William Hunting, F.R.C.V.S., 1888.)

No. 21. MAY 26, 1928. Vol. 8.

Specific Nephritis (?).*

By Major Frank Chambers, O.B.E., F.R.C.V.S.

It is with certain misgivings and feelings of trepidation that I am bringing to the notice of the Central a pathological condition occuring in the dog that I am inclined to describe as specific. I may be hopelessly off the track, but I am sure that you will bear with me and compare your experiences with mine. In this way some light may be thrown on the subject, and I may go away armed with fresh knowledge. But for the absurd laws which govern the issue of permits to do inoculation experiments in this country, I could have carried out some inoculations with blood from such cases as I propose to describe and have settled the question of a causal organism.

As the matter now stands I am as much in the dark as I was twelve months ago. The first case that I saw of this disease—which I have designated specific nephritis—occurred in April, 1927. The subject was a three-year-old Great Dane male. I had known this dog since a puppy. In November, 1925, he had a very acute attack of distemper of the gastro-intestinal type, but made a good recovery. He never had a minute's sickness until he was taken ill on April 23rd, when he was noticed off his feed. Vomition occurred several times during the day. On the second day of his illness the temperature was 104, the pulse quick and small. There were great thirst and an anxious appearance. The dog would come out of his kennel and walk about. I prescribed for the vomition and this symptom soon cleared up. After the vomiting ceased I noticed that the breath smelt very strongly of decomposing urine. The visible membranes were congested and there was a very definite hæmorrhage into the anterior chamber of the right eye. On the 27th I called a colleague of mine in to see him, but he was as much mystified as I was. The diagnosis was purpura hæmorrhagica caused by some unknown organism. No food was taken voluntarily, but the intense thirst continued until June 6th, when he died. It is unnecessary to detail the numerous drugs, vaccines, etc., that were tried. *Post-mortem* revealed heart, lungs, liver, stomach and intestines normal. The kidneys were much enlarged and small hæmorrhages were dotted over the surface. Histological examination of the kidneys was carried out and the report was acute nephritis. The blood was not examined. Several cases were then seen in rapid succession. They all exhibited exactly similar symptoms and all the cases were in male dogs from four to six years old, and all had lived a sheltered life. The first of the succeeding cases was a four-year-old Sealyham terrier. I had known this dog from puppyhood, and every holiday was spent with me. In July this dog was brought in as a boarder and the owner complained that the dog consumed a great quantity of water, but was otherwise fit and well. Four days after arrival he exhibited symptoms of gastritis. A few doses of hydrated bismuth stopped the sickness, but the kennelman reported that although the dog cleaned up his food yet he drank a large amount of water. Ten days later he ceased to feed and it was noticed that the breath was most foul, yet the mouth and teeth were quite clean. Forcible feeding was resorted to, but in spite of everything the dog died on the 26th day after admission. *Post-mortem*: Lungs—ecchymoses irregularly placed on the surface. Stomach—liver and intestines normal. The kidneys were smaller than usual and the capsule stripped with difficulty. Histological examination revealed chronic interstitial nephritis. Here was a slightly different condition than I had met with before, and the condition was more chronic. One does not expect to meet with nephritis of this type in a four-year-old dog.

As mentioned before, the owner had noticed that the dog had drunk more than usual and yet when he was brought to me the dog appeared in perfect health for the first few days and was then suddenly taken very seriously ill. He was exercised twice daily, so there could be no reason to suppose that retention of the urine could give rise to such an acute uræmia.

The fourth case to be seen was in a half-bred Irish terrier six years' old—a great pet of the owner's. He had vomited several times, and the owner thought that the dog was poisoned. He was treated for gastritis and the vomiting ceased in 24 hours. Desire for food was completely absent, but there was a great and constant thirst. Temperature was 101.8, pulse rapid and thin. The dog was admitted to hospital, but during the six days he was in he never took a morsel of food on his own account. The breath smelt most strongly of decomposing urine. Here was a case of uræmia, most marked, which did not yield to various kinds of treatment, including washing of the blood. The owner eventually asked for the dog to be destroyed. *Post-mortem*: Body fairly well nourished. Lungs showed a few areas of consolidation. The stomach and intestines were normal, but the liver was congested. I sent the kidneys, bladder, etc. to Dr. Hare, and he reported "Macroscopically the kidney resembles the type known as the 'flea-bitten kidney,' and is associated with acute infections. The lungs show numerous ecchymoses. The bladder and prostate reveal nothing abnormal. Sections of the kidneys show those changes due to an acute parenchymatous nephritis. Macroscopically and microscopically there is evidence to support your diagnosis as to some acute infectious process."

A sample of blood taken during life examined for urea by Dr. Dyke (pathologist to the Wolverhampton and Staffordshire Hospital) showed over 400 milligrams of urea per cent.

The next case occurred in a six-year-old Airedale dog. He was taken ill very suddenly and on the fourth day became unconscious. The symptoms exhibited were as described for the other cases. Dr. Dyke examined the kidneys and reported that "They show a very peculiar type

* Paper presented to the Central Division N.V.M.A., in London, on Thursday, May 3rd, 1928.

of renal change. On section the cortex shows a radial streaking. Microscopically this is seen to be due to intense fatty changes of certain of the tubules, apparently portions of Henle's loop. I have not seen this type of change in the human subject. Other findings of interest in this case are that the blood urea is over 500 mgs. per cent. and the presence of a streptococcus in the blood."

Most of the cases occurred in dogs round about six years' old, but in December of last year I saw a typical case in a two-year-old Fox terrier. This dog commenced with vomition. He was carefully fed with milk foods, all given forcibly, and in a few days the dog improved very much. Treatment was guaiacol carb., gr. v doses, three times daily. He now commenced to feed, but on the 11th day had a relapse and in 24 hours was unconscious. *Post-mortem* revealed all organs normal except the kidneys, which presented the typical flea-bitten appearance. Histologically they showed acute glomerular nephritis. Blood urea was 300 mgs. per cent.

Examination of the urine from these cases showed albumen to be present from .05 to .5 per cent., casts, red cells and nearly always spermatozoa.

In all, 28 cases of this type have been seen since April, 1927. A number of cases of chronic interstitial nephritis have been seen in old dogs, but these cases exhibit distinctive differences. There is the usual thirst, but the vomiting is persistent and is difficult to control. The mouth smells very badly, and the tongue and gums have an unhealthy appearance. The temperature is subnormal and the pulse quick and "wiry." The body will be emaciated. *Post-mortem* will usually show ulceration of the stomach and the kidneys will be small. The capsule will strip with great difficulty, and the surface will be rough and irregular.

Is this a new condition, or is it just a coincidence that a large number of very acute cases of nephritis should have been observed in such a short period? During the years that I have been in practice I have not observed a similar condition. It is hardly possible that I should have missed them or diagnosed the condition as something else. Hutyra and Marek describe acute nephritis as an injury to the tissues of the kidneys induced by toxic or infectious influences, with or without the passage of fluid and cellular blood constituents, and with or without proliferation of the kidney tissue. It is recognised that, in most instances, acute nephritis results from acute infectious diseases, in which the micro-organisms remain lodged within the glomeruli or in the interlobular blood vessels, or from bacterial toxins and inflammatory products which are being eliminated through the kidneys. In this manner acute nephritis frequently results from anthrax, swine erysipelas, distemper, etc. and in a similar manner every extensive inflammation of the gastro-intestinal canal may give rise to a nephritis. The condition which I have described is really an acute uræmia. Of this condition, Scott, writing in his "Indexed System of Veterinary Treatment," says: "In veterinary medicine this condition is seldom seen, or perhaps it may be more accurate to say, seldom diagnosed." In ordinary cases of acute nephritis recovery should take place in a few days providing the basic condition itself does not endanger the life of the animal. In the disease, or condition that I have described, is there a basic condition due perhaps to a filter passer which causes the nephritis with the attendant uræmia that finally kills the animal? The basic condition is not, in these cases, distemper, gastro-enteritis or Stuttgart disease.

Treatment is hopeless. I have tried almost every drug that has been recommended for the treatment of nephritis. Washing of the blood stream does reduce the uræmia, but as long as the kidney condition remains, the high percentage of urea in the blood stream returns very quickly.

. . . . . .

Before declaring the paper open for discussion, the President (Captain W. K. Townson) invited the essayist to make any supplementary observations he desired.

Major Chambers, complying, said: I must apologise to you for the rather brief way in which this paper is put together, but being rather short-handed and being pressed very specifically by your Secretary, I hurriedly did my best to meet his wishes. I could have made the paper very much longer by going into details collected from the various text-books, and many more cases could have been described, but I did not think such a course would have been of any great value. One thing I missed out—about the action of the dog when he walked. In my description of the symptoms of an animal affected with this complaint, I should have stated that he walks very stiffly, with the back arched, and that when you press him over the kidneys he evinces considerable pain and resents it. I may also stress the point that I have never seen a case in a bitch. I have seen such a number of cases in such a short time that I cannot think that, being an individual of ordinary powers of observation, I could possibly have missed cases had they occurred during the 15 to 17 years I have been in practice.

I have had a great number of sections of kidneys cut, because I have some good friends on the pathological side, and they have been very kind to me in cutting sections and letting me have their reports. To these gentlemen I am very much indebted. If any Fellows here who have seen cases can give me the benefit of their experiences I shall be amply repaid for my journey here to-day. (Applause).

Discussion.

Professor G. H. Wooldridge: complying with the President's request that he should open the discussion, said: I have read Major Chambers' paper with very great interest indeed, and I hesitate to offer any criticism with regard to the conclusions at which he has arrived, as to whether or not he has met with what might be described as a specific form of nephritis. Most of the cases he has described, and the general symptoms he gives as a whole, correspond with numerous cases of nephritis that one meets with quite regularly, but it is a curious fact that I have met with more cases of nephritis in the dog during the past twelve months than in any previous year—in a number of instances certainly acute nephritis, but in a greater number chronic nephritis. The conclusion I have generally drawn from these latter cases is that in the majority of instances the lesion was a sequel to distemper, in some cases following a month or two after apparent recovery from distemper, and in the case of old dogs, as in the cases recorded here, where distemper of a severe character had been passed through several years previously.

I have not met with the condition he describes here, of the existence of numerous small hæmorrhages in the kidney, except in conjunction with distemper. It is exactly the same type of thing that I have seen in those

acute cases of distemper that one sometimes meets with, and also in hyper-acute cases of swine fever. The same type of hæmorrhages is seen in the cortex and under the capsule of the kidney.

In my experience, in all acute and sub-acute cases a rolling gait is quite characteristic; in chronic cases there is some weakness in the gait, but not the same degree of rolling. Along with that is a very definite wasting of the sub-lumbar muscles. You cannot always feel an enlarged kidney; in some instances there is a smaller kidney than normal, especially in the chronic cases. I do not recall any reference to the suppression of urine, and in my experience, in all except the acute cases of nephritis, there is excessive urination. It is suggested that in some cases the symptoms are due to uræmia; my point is that in many cases there has been no suppression of urine and therefore there could be no uræmia.

Another point, which is perhaps purely an academic one, is as to whether or not urea in the blood, in any case, will cause the symptoms. Analysis of the blood has been made in several instances, but I think I am right in saying that the injection of urea into the blood stream does not produce any of these symptoms. Though the condition may be something to do with defective renal action, the assumption that it is urea poisoning is probably wrong. I believe the urea content of the blood might be taken as an index of the presence of other toxic substances which are not specified, in the same way as the CO_2 content of a stable may be taken as an index of the content of other and more serious impurities in the atmosphere.

As to treatment, like Major Chambers, in acute cases I have been very disappointed in the results of the treatment adopted. In sub-acute cases, however, I seem to have been a little more fortunate in many cases, which have responded to a combination of hexamine, sodium salicylate and tincture of buchu and the internal administration of cod liver oil and malt. Water has been cut down and milk substituted. Where thirst is very pronounced and the animals have refused to drink milk, they will sometimes take barley water.

I had another point in mind, but it has escaped me for the moment.

Professor A. R. SMYTHE:. I also would like to thank Major Chambers for his very interesting paper. I do not know that I can say very much about the condition described, because I do not think I have observed an exactly similar one, but there were certain points in the paper that struck me. One is in regard to vomition. Major Chambers states that it ceased with a dose of hydrated bismuth, or some similar line of treatment. It appears to me as being rather peculiar that if the vomition is due to excess of urea, or occurs as a result of a bacillary infection, that the gastritis should clear up so quickly. I should like to know if the essayist has had any analyses made in the early stages of the disease and, if he has, what the urea content was. It would be interesting to know whether the urea was present in excess in the early stages or whether it only collects in the blood a day or two before death. If a condition of acute nephritis exists and if the excretion of urine ceases, then as a matter of course the urea must collect. I should further like to know what the symptoms are shortly before death—whether there is a sub-normal temperature, frenzy, or delirium, or any of the symptoms that we more or less associate with uræmic poisoning.

I think analysis of the blood is rather a new departure in veterinary medicine; I am pleased to see it, and should like to see similar methods adopted to a greater extent. As to the action of these dogs—one meets with many dogs which walk with a rigid back and a peculiar gait. Personally, I have associated the condition more with gastric trouble than with kidney disease, although of course I admit that it does occur in kidney trouble also. I often suspect the so-called hæmorrhagic gastritis (Stuttgart disease) when I see that gait, especially when very marked.

I would like to know what Major Chambers means by washing the blood stream. Atophan is a drug which is supposed to increase the output of urea from the blood stream; it has the reputation of being the best drug for this purpose, and I should like to know whether Major Chambers has tried it.

Professor WOOLDRIDGE: Might I now refer to the point that was in my mind, but which escaped me when I sat down? Professor Smythe's remarks have brought it back to me—it was the question of vomition. I have not associated the vomition of nephritis with gastric trouble. It appears to differ in that the vomition seen in nephritis is in no relation whatever to the ingestion of food, whereas the vomition in gastritis always follows the taking of food or water. I think that point assists one in differentiating the conditions.

I may also mention that in this affection the deaths, in my experience, very frequently occurred during a very cold night; in fact, I hate getting these cases in winter.

Dr. A. L. SHEATHER: I may be able, perhaps, to add a little bit to the discussion. It is not long, as you know, since I have been in a position to meet with cases more or less haphazard, but in the last three months I have had three cases of the type described by Major Chambers, where the animal has been dull, depressed and rather thirsty, and has vomited occasionally, death occurring suddenly. In each case the only pathological change observed was an acute interstitial nephritis. One animal was taken to a veterinary surgeon because it had vomited occasionally, and it was placed in the kennels until he could examine it. An hour later it was found dead. The three cases that have come under my notice have all ended in sudden death.

Looking back over a good many years and on many hundred *post-mortem* examinations on dogs, I think if I were asked what is the most frequent lesion one finds in dogs, I should say chronic interstitial nephritis, but one has often wondered what that disease began as, and I think it is very probable that the disease begins as this acute interstitial nephritis.

One of the dogs I had in the last three months certainly had been over distemper about three months when this acute interstitial nephritis developed and killed it.

I wonld like to congratulate Major Chambers on his accurate observation of cases.

Mr. R. A. WILLETT: I have had half a dozen cases which were very similar to those mentioned by Major Chambers, and out of that number only one is still alive. This dog is a mongrel, about five years' old, and the only thing noticed about him was his gait, with an arched back. He walked with straddled legs and showed great pain in doing so. I was told the dog had rheumatism. He also showed pain on being handled over the region of the kidneys, and one could feel that the left kidney was very much enlarged. There was no vomition in this case, but whether that was because directly I saw him the water was cut down, I do not know. He certainly had a thirst developing. Personally, I think barley water does a great deal of good in all cases in which nephritis is diagnosed.

The ordinary urinary antiseptics were used and are valuable, and also you get quite good results from injections of normal saline. Whether that is due to washing the blood stream and removing excess urea I am not sure, because we had no blood analyses made. This dog has had about six weeks' treatment and is now back again in normal health. You can still feel the kidney remaining enlarged, but there is no pain at all now.

The PRESIDENT now extended a welcome to Captain H. S. A. Dunn, of Hove, and invited him to take part in the discussion.

Captain DUNN: As a visitor to-night, I am delighted to see my very old friend Major Chambers here to give you a paper. He and I were students together 25 years ago and he has always been one of the leading lights of the profession. (Applause.)

I have not seen this particular condition Major Chambers has described—the dogs at Hove do not appear to have it—but we do see a number of cases of nephritis. I quite feel that what Professor Wooldridge has said is absolutely the thing and I do not propose to add anything to his remarks. I am hoping to become a Fellow of the Central

Veterinary Society and perhaps I shall have opportunities of speaking here on other subjects. (Hear, hear.)

The PRESIDENT: Before asking Major Chambers to reply to the discussion, I wish to say that I am sure we are all deeply indebted to him for coming such a considerable distance to give us what one can only describe as a clinical treat. (Hear, hear.) I do not propose to attempt to take part in the discussion, thinking that that has been well left to our up-to-date pathologists, so that I shall content myself with thanking Major Chambers, on your behalf, for the excellent contribution he has made to our present series of papers. (Applause.)

THE REPLY.

Major F. CHAMBERS: I much appreciate the way in which you have received these rather scattered notes, but, as I have stated before, I presented them in the hope that I might learn something, and if anything I have written or done has helped forward the aims and objects of this Society, I have been amply rewarded. (Applause.)

In reply to Professor Wooldridge, I was very pleased to hear what he had got to say, because for every dog I see he sees a hundred. I can deal with the question of urea in the blood stream now. I have searched through almost every veterinary and other work on pathology and pathological technique with a view to finding out if anything has been done with regard to the question of the urea content of the blood in the dog, but could discover practically nothing. In order to find out what was the normal urea content, Dr. Dyke made several examinations of the blood of apparently normal dogs, I think of five years' old. About 10 c.c. of blood was taken from the jugular vein. The whole principle is that the urea of the blood stream is fermented by the aid of soya bean, the gases are driven off, collected and measured, and you can tell the amount of urea there by definite, known tables. The quantity of urea in normal dogs varies considerably—from about 47-57 milligrams per cent. The amount of nitrogen varies from 250 to over 500 milligrams per cent.

In regard to finding the urea early on, the Airedale was taken in for vomition and it was three days later that the vomiting ceased. As Professor Wooldridge has said, vomition has no relation to the ingestion of food, as they won't eat. A sample of this dog's blood was taken on the third day, and his blood urea content was over 350 mg. per cent. He lasted seven days and then he became comatose and died.

Re the lesions being the sequel to distemper, they may be, but in the majority of cases I have known the dogs from puppyhood, and in only one case could I get any history from the owner that the dog had had distemper, and that was in the case of the Great Dane, which I have described. As you know, many cases of distemper are very mild and may pass quite unnoticed by the owner.

In these cases of nephritis the dogs urinated frequently, so that there is no question of retention of urine causing uræmia. Referring to the symptoms before death, as I have said, sub-normal temperature is one. The temperature is in the region of 100° to 99½° during the time they are ill. In some cases I have seen delirium, but in only three cases, I think, and they eventually became comatose. I have washed the blood stream with normal saline in two cases, but it was a useless business.

I am very pleased to hear Dr. Sheather's remarks, because they rather bear me out, and it is also interesting to notice the differences in those cases of acute interstitial nephritis; in my cases they were acute glomerular nephritis, but there were cases of acute interstitial nephritis as well. Chronic interstitial nephritis is a very common thing, I am beginning to think, and we see quite a number of cases in old dogs. I have never seen a case of specific nephritis in a female.

(Professor WOOLDRIDGE: Quite commonly, particularly in Bull bitches).

Major CHAMBERS: I have often wondered if it was peculiar to males, and the question of balanitis arises in this connection—the ingestion of large quantities of pus might, I thought, have something to do with this condition.

Concerning treatment, I must confess I have not been successful in treatment. I have one case now under treatment, a four-year-old half-bred Terrier that has had acute nephritis, and I have treated him with guaiacol carbonate, 5 gr., three times a day, and no doubt this dog is better, as he is eating now. This dog has now become a sub-acute case; he still has a sub-normal temperature and his appetite is capricious, but his thirst has almost disappeared. He had over 200 milligrams of urea in his blood, and when I first saw him he had much more than that. I give guaiacol carbonate because an old lady gave her dog some by accident and it cured him. She was taking it herself for rheumatism, and I had prescribed sodium salicyl. for the dog. By some mistake the dog got the guaiacol carbonate and she got the Na sal. (Laughter.) Atophan I have never tried, but I have read some time ago that it was a very dangerous drug, as it was said to cause yellow atrophy of the liver in the human subject.

I should not like to sit down without saying how pleased I am to see my old friend Captain Dunn here.

Thank you very much for the kind hearing you have given me.

Some Phases of Equine Dystocia.*

By C. G. GLENDENNING, M.D.C., Clinton, Illinois.

During my forty years in the veterinary profession, therapeutics have been revolutionised, improved methods and better therapeutic agents have been introduced. The mortar and pestle have disappeared and scientific laboratories do the compounding, and furnish us with neat, convenient packages, all of which are improvements over the former crude methods. But what I expect to say to-day relates to that part of our supplies the laboratories cannot put up in packages, as, for example, the resources required when a young practitioner is brought face to face with a case of dystocia in a mare. Such problems must be learned by experience. The teachings of the class room fail in regard to the details which only experience, coolness, and good judgment can compass. No teaching but experience can develop the sense of touch required to distinguish a knee from a hock, a nose from an ear, or a hip from a shoulder, and yet successful obstetrical practice is impossible without such an accomplishment.

You older men need not listen to what I say, but younger ones may profit by some of the experiences I have had. A careful examination is mandatory and this should be done calmly, cleanly, and, lastly, with rapidity, as a few minutes may mean the life of your two patients, the mare and the coming new-born. The case at hand may require only a little help or it may require all of the ingenuity a man can evoke. In the difficult, complex case, it is advisable to request the assistance of a colleague without delay. The best of us need such assistance. Among other general rules which might be mentioned are (1) never to employ traction until the mal-presentation is corrected; (2) never to resort to extreme traction such as horse power or any quick power; (3) to limit the traction to steady force which enables the genital route to expand. When the tenesmus is violent and the pain great it is safer, for

*Read before the 45th annual meeting of the Ill. S. V. M. Ass'n Nov. 29th, 1927. Reprinted from *The North American Veterinarian*, Vol. 9, No. 3, March, 1928.

both the operator and the animal, to administer an anæsthetic. The paraphernalia required and which should always be available, comprises, chloroform or ether, chloral, antiseptics, lubricants, cords, knives, hooks, and special obstetrical instruments.

Waste no time unnecessarily. For example, if the fœtus is beyond redemption, when the head is protruding and the legs folded back, decapitate without delay and stitch the redundant skin over the vertebra to prevent wounding the mother. This done, the rest is easy and a striking contrast to having wasted precious moments attempting to extend the folded legs otherwise. When the head is flexed backward and the legs protruding, no time should be lost in removing both limbs. To accomplish this, incise the skin from the cartilage of prolongation if possible to the foot, and skin the entire leg and shoulder with the hand. When this accomplished the leg can be taken away by traction and when both have been removed, the head can be returned to its proper position. The skin of the legs may be fastened to a cord and pulled upon to straighten out the shoulder when traction is applied. If difficulty is met in bringing the head back, break the ribs from the sternum and eviscerate the thorax and abdomen. As a rule the head can then be reached. It may be possible to reach the hind legs and thus effect a posterior delivery. In any event, the life of the mother, which is the sole purpose of the operation, must be protected against the effect of injury.

To turn a leg back without amputation, slip a loop of a small sized cord over the foot and have the helper pull while the hand guides the foot in its turn, in order to prevent injuring the uterus. A forward push on the shoulder, which is apt to be drawn into the pelvis, will help.

There are dystocias in which the fœtus is protruding as far as the shoulders and the hips obstructed by the pelvis. The hips are too large to pass into the pelvis and for that reason extreme traction would be harmful. Or, the hind feet may be coming along with the hips in the flexed position. Sometimes the fœtus is turned slightly on its side, in which case a little torsion will allow it to be delivered easily. In this form of dystocia, that is, when the hips are too voluminous to pass into the pelvis, evisceration must be practiced aud the fœtal pelvis split with the V-shaped chisel. When the chisel has been set, have the helper strike it hard with a sledge. The heavier the hammer used the better. Breaking the fœtal pelvis in several places, enables the tubecoxæ to yield enough to allow them to pass into the maternal pelvis and thus make delivery possible. On the other hand, when the obstruction is caused by the flexed hind feet coming along with the body, it is no easy matter to get them back into position. It may be necessary to section the fœtus in two as far back as possible, suture the redundant skin over the exposed bones and attempt to effect a posterior delivery. The most difficult case of this type I have ever encountered was that of a fœtus the feet of which could not be located, and which, despite breaking the pelvic bones, would not budge an inch. After sectioning the fœtus across the loins and pushing the carcase back, the legs were found to be turned backward in the form of a circle over their respective stifles where the uterine contractions had them locked. The delivery was effected after cutting every muscle and tendon within reach and then, with the aid of cords looped to the feet, drawing them into position by gentle traction.

In handling obstetrical cases, the possibility of twins must always be considered. After delivering one fœtus, twin pregnancy must be excluded by a careful examination to provide against the embarrassment occasioned by the birth of a twin later.

In the case of the presentation of one fore and one hind foot, it is usually preferable to plan a posterior delivery, as the fore leg is the easier one to amputate, although much may depend upon the position of the hind leg. Always remove a fore leg at the shoulder. Any other course only invites trouble. Breech presentations with nothing but the tail in the vagina are formidable. The best procedure appears to be disarticulation of the hip joint and gradually tearing the limb out by means of a cord looped over the head of the femur and breaking down and severing the muscles and skin as gradual traction is applied. When both hind legs have been thus removed, the delivery is effected by means of hooks fastened to the pelvis.

There are dystocias due entirely to the large size of the fœtus—too voluminous to negotiate the maternal pelvis. No rule can be set down for such cases. General anæsthesia will be helpful in dismembering the fœtus, and sometimes the removal of one foreleg will be sufficient to allow it to be delivered. Failing in this, the other fore leg and then other portions of the body are taken away as conditions require.

Finally, among the more common dystocias, are those in large mares where nothing but a back or abdomen can be reached with the full length of the arm. The only thing to do is to cut in and hook on to anything one is able to reach, eviscerate the fœtus or attempt to section it in two after gradually drawing it forward with the hooks. This done, attempt to draw out the half your judgment suggests, keeping the other half from entering the pelvis. I have had several cases of this type that were delivered after others had given up in despair.

I might also mention cases of "dry birth," where the uterus is firmly contracted over the fœtus. Here lubricants are indicated, but I have had cases wherein I could scarcely force the hand to the place where lubrication was required.

Lubricants injected about the fœtus with a force pump, if properly made and used in sufficient quantity, will overcome the "dry birth." They should be used quite warm, as the warmth appears to relax the contraction.

Obstetrical operations are like a good game of chess. The player must know how to get the queen out of tight places. During the first twenty years of practice I would have from twenty-five to fifty cases of dystocia in mares every season, and I found that practice made perfect. For this reason I have feared that with the decline in breeding, the art of equine obstetrics would decline correspondingly.

Foot-and-Mouth Disease.

In the House of Commons recently, the Minister of Agriculture informed Mr. Day that during the twelve months ended March 31st, 1928, 14,714 animals were cremated on account of foot-and-mouth disease and 621 were buried.

The Veterinary Record.

26th May, 1928.

R.C.V.S. ANNUAL MEETING.

Formal Opening of New Library.

The Annual Report of the College and the voting papers for the annual election of Council have been issued during the present week, and we would urge upon all members the duty of recording their votes.

The last day for receipt of voting papers is Thursday, May 31st, and it may be well to remind members that voting papers which contain more than 8 names unerased, or which are unsigned or which arrive at the office of the College after May 31st, will not be counted.

There are 14 candidates for the 8 vacancies, so that at least six names must be erased.

The Annual General Meeting will be held at the College on Thursday, June 7th, at 12 noon, when the declaration of the poll will be made by the President, and the Annual Report will be submitted for adoption. There will also be a presentation of certificates to the winners of the Fitzwygram, Williams and Walley Prizes, and of the John Henry Steel Memorial Medals which have been awarded to Professors Share-Jones and Wooldridge.

As will be seen from the Annual Report, the Library of the College, which was endowed by the War Memorial Fund, has now been refurnished, and provision made for the accommodation of 10,000 books. The furniture is of British oak, and the contractors have been fortunate in securing for the purpose a supply of oak of the same kind as that being used for the furnishing of the new Bank of England buildings. Arrangements have been made for an opening ceremony at 3 p.m. on the day of the Annual General Meeting, June 7th. The Rt. Hon. Colonel L. S. Amery, Secretary of State for Dominion Affairs and Secretary of State for the Colonies, has kindly promised to attend and to declare the Library open. Other distinguished guests have also been invited, and as the space in the Library is limited, all members wishing to attend should apply for tickets from the Secretary of the College, 10 Red Lion Square, as soon as possible. Places will be reserved for Members of Council and official guests, and the remainder of the seats will be allotted in order of application.

CLINICAL AND CASE REPORTS.

Some Curious Experiences when using the Stomach Tube.

By Major C. H. S. Townsend, O.B.E., M.C., F.R.C.V.S., R.A.V.C.

During the past few years the writer has used the stomach tube a great deal and during that time has encountered several unusual happenings which, it is thought, are worth recording.

Case 1. When passing the tube in the usual way up the off nostril, the tube seemed to be travelling normally, when the end of it appeared from the near nostril. It seems difficult to understand how it turned the corner in the pharynx.

After being withdrawn it was again passed, this time without untoward incident.

Case 2. A point is always made of never injecting any liquid through the tube until the end of it is actually seen passing along the œsophagus at the lower third of the near jugular furrow. Incidentally, the tube is marked to show when it has reached the spot at which it is most easily visible. When the tube has been inserted as far as this mark, its end is always visible even in the thickest-necked horses, especially if the neck is inclined slightly towards the off side, at the same time moving the tube up and down a few inches.

When inserting the tube in one case its end was not visible on the near jugular but was, strange to say, plainly visible in the off jugular furrow. The tube was withdrawn and again inserted, when it passed along the near jugular furrow in the normal manner.

Question.—Is it usual for the œsophagus to be movable from one side to the other ?

Case 3. In using an old tube which had become rather flexible, it had been seen to pass along the œsophagus, but in slowly commencing to pump no liquid would pass through the tube. As it was thought there was some obstruction present in the tube, it was withdrawn, when the liquid at once passed through it normally. It was again inserted and again no liquid would go through. On putting increased pressure on the pumping there was a sudden flick and the drench passed through normally. The cause of the obstruction was that the tube had doubled on itself about six inches from the end and the increased pressure had caused the tube to undouble itself in the œsophagus. The same thing has happened several times when using a tube which has become very flexible after much use. If the first six inches or so are cut off, the tube becomes serviceable again for a time.

Case 4. Regarding the marks on a stomach tube, at present a pattern is being used which has been marked by cutting a niche round the tube, thereby weakening it.

The writer has often wondered what the makers of this particular pattern would say if the tube broke at one of these marks and left a foot or so of it in the œsophagus.

It is not considered that the first mark, which is a foot or so from the end, is necessary, but it is of great help to have a mark about 36in. from the end to indicate where the tube should be visible passing along the œsophagus.

Incidentally, why is it called a stomach tube ? Surely the correct nomenclature would be œsophageal tube, as it is seldom passed right into the stomach and for the administration of large quantities of medicine need only be passed half-way down the œsophagus.

In spite of the foregoing happenings, they cannot be called accidents, as no uutoward results have so far occurred from its use. The writer is a great believer in using the stomach tube as a routine practice for the administration of fluid medicines to horses, and while in possession of a stomach tube and pump it is hoped never again to have to drench a horse with the usual co-incidents of struggling and resistance on the part of the animal, half the medicine spilt, and the administrator left in doubt as to how much has been swallowed or how much has gone down the trachea, to say nothing of how much has been deposited on one's own clothing.

Post-mortem Specimens from Small Animals.*

By G. H. Wooldridge, F.R.C.V.S., M.R.I.A., Professor of Medicine, Royal Veterinary College, London.

Cystic enlargement of the Uterus and Ovaries of a Cat.

The first specimen I have to show is the uterus and ovaries of a cat on which I performed ovaro-hysterectomy this morning. It was a tabby cat, between 11 and 12 months' old, that had been kept strictly indoors and therefore had never had kittens.

I operated through the middle line, and the first thing that struck me was the increased size of the horns of the uterus. They were very easily picked up, and as I drew the ovary out on the right side, first, it was seen to be about the size of a small hazel nut, the enlargement being chiefly cystic. A considerable number of small cysts were present, giving it a mulberry-like appearance. After ligaturing and detaching that, I picked up the other ovary and found that to be in a similar condition, though not quite so large. Owing to the thickness of the uterus, I split that to see the condition of the mucous membrane, and I found throughout the course of each horn and extending just into the body of the uterus a number of small cysts, similar to those in the ovary, except that they were smaller. There is quite a considerable number of them diffusely distributed throughout both horns.

Only on two occasions have I seen this condition previously in the cat, though I have seen and described a number of cases in the bitch. On the two former occasions in the cat, the animals were brought to me as simple cases of nymphomania in the adult cat, and one was not surprised when one saw the condition of the ovaries and uterus. The owner of this cat tells me that the animal appeared to come into season at very frequent intervals—intervals of only two or three weeks : perhaps a little more frequently than normal, but that she showed no other symptoms whatever.

. . . . .

Tuberculosis of Eye and Kidneys, etc. in a Cat.

Specimen number two consists of one eye and one kidney from a cat. I saw this cat on Tuesday of this week with Mr. Balls, of Brixton, who brought it over to the College for me to see. This eye was between two and three times the size of the other, which was normal, and it was widely dilated. On looking into the interior of the eyeball one could see the retina creamy white, with reddish striations. Examination of the pharyngeal glands showed them to be slightly enlarged. The cat was very thin and emaciated, general muscular atrophy being well marked. I palpated the abdominal cavity, but could find no trace of abdominal tubercle ; nevertheless, I expressed the opinion that the cat was probably tuberculous. The lady owner said " I know what that means ; I am a tuberculous subject myself." I gathered from her that this cat was almost always with her, even at night, and it would be interesting to find out if the cat had been infected by the owner. I advised destruction, and this was carried out by Mr. Balls, who sent the cat to me for *post-mortem* examination. We removed the eye, and you can still see the white appearance inside. The glands of the throat were about three or four times the normal size, but they were not caseous. The mesenteric lymphatic glands at the junction of the ileum and the colon were affected with tubercle and were caseating but were not so large as is sometimes seen. The spleen was spotted throughout. The kidneys were both split open, and the first impression one got in each case was that there was an infarct, but as you stripped the capsule you got the nodular appearance on the outside of the cortex.

Curiously enough, although the body was wasted, there was a considerable amount of abdominal fat.

. . . . .

Ball wedged in the Œsophageul foramen of Diaphragm. Removal by Gastrotomy.

The remaining specimen is not of very great interest, except for the history of the case. It is a small " Sorbo " ball. An Airedale terrier was brought to me, a fortnight ago, with the history that he had swallowed a ball two inches in diameter four days previously. When I saw him he was very weak. I could feel nothing in the abdominal cavity, and I suggested that an X-ray photograph should be taken. Mr. Ross, of Brixton Road did so and 'phoned me to say that he could see the ball clearly and that it appeared to be wedged in the neighbourhood of the diaphragm. I gave the dog gr. iss. morphia and an hour afterwards further anæsthetised him with chloroform. A mesial incision was made fairly well forward, in front of the umbilicus. I had to make a fairly large one, in view of the size of the object I hoped to remove, but even then I had to enlarge it, as I could feel no sign of the stomach, and found it necessary to insert my whole hand, but even then could not find it. I passed my hand down between the liver and the diaphragm and then I was able to pick up the stomach, and in front of it, close to the diaphragm, could make out a hard body. After manipulating it into the stomach I raised it, and, opening the stomach, took out the ball. I closed the wound with continuous sutures which I then buried beneath a series of Lembert sutures.

The dog made a perfect recovery. This is an interesting instance of the way in which the use of X-rays may facilitate the making of a diagnosis sufficiently accurate to enable one to operate, whereas without their use, one might not have felt justified in doing so, as the foreign body could not be felt and one not infrequently meets with cases where it is asserted that something has been swallowed and the object is afterwards found elsewhere.

* Exhibited to the Central Veterinary Society, May 3rd, 1928.

Persistent Thymus Gland in Sheep Dog.

By T. F. Prime, M.R.C.V.S., Upper Norwood.

Late one night the owner of a seven-months' old Sheep dog called at the surgery for some medicine for her puppy, as he had been violently sick, and I prescribed a bismuth mixture. Two days afterwards I was asked to visit the dog as he was prostrate and had had diarrhœa. On examining the dog, I found that he was very messy under the tail, which parts were cleansed. The dog seemed to be well otherwise and the temperature was normal.

Two days afterwards I received an urgent message to come at once as the dog was very prostrate and appeared to be dying. On arrival, I found that the dog was dead, having passed away quietly. When making a *post-mortem* examination, I found the abdominal organs to be healthy. On opening the chest cavity, I was unable to see the heart, as it was covered with what seemed to be an extra lobe to the lungs. The thymus gland was extremely big, covering the heart, and the pericardium underneath was very thickened. The thymus extended right up into the channel of the neck. The left lung was slightly congested, but not enough to cause death. One could only assume that death was due to status lymphaticus and that the slight sickness and diarrhœa, although comparatively trivial, were due to a persistent thymus gland sufficient to cause death.

Recently, on making a *post-mortem* examination on an eight-year-old cat, I found that the thymus gland was of fair size and quite dark in colour. Death in this case was due to gastritis from rat poison. A persistent thymus gland is occasionally found, but in most cases it is normal in size and it is only when it is hypertrophied that one assumes, in cases of death from apparently insufficient cause, that the enlarged gland is the cause of death.

Note on a Curious Fact regarding Wild Oxen.

By R. MacGregor, M.R.C.V.S., Government Veterinary Surgeon, Pahang, West-Raub.

Recently I had an opportunity of inspecting some skulls of male seladang (*Bos gaurus hubbacki*), the wild ox of Malaya.

Of these skulls, five aged animals showed a distinct injury to the right frontal plate just below the cornual ridge, in three cases amounting to penetration of the bone. Three of these skulls also showed a deep groove at the base of the left horn. Six skulls that showed no such marks, although mature, were not as old as those mentioned above.

I also saw five mounted heads. Two, also aged animals, showed scars in the skin over a point where the scars in the bone would have been.

My host, Mr. T. R. Hubback, an enthusiastic field naturalist and game warden of Pahang, pointed this out to me and held that it was due to fighting. His suggestion is that the animals tend to lock together the left horns when fighting and that the friction or blow of the horns produces the groove, while the point of the left horn tends to strike the opponent's skull, more or less at the same place, thus causing the injury to the skull. As the animals strength wanes with age so the tendency to receive injury increases.

I append a photograph of one of the skulls I examined, showing both a groove in the left horn and an injury to the right side of the frontal plate.

Domestic oxen are not usually allowed to fight, but a couple of years ago I was enabled to watch buffalo fighting in Kedah, where it is a national sport. I cannot recollect any distinct tendency to use one particular horn, but a skull that I saw of an animal killed in one of the fights—a very rare occurrence—showed a depressed fracture of the right frontal plate.

I can also recollect seeing a bull attempting to gore a dog, and he certainly endeavoured to keep his left horn towards his enemy.

The point appears to me to be of interest as showing a distinct realisation of the least vulnerable side of the body, *i.e.*, the left flank containing the rumen. Wounds in this flank are less likely to be serious than wounds in the right flank and intestine, and I would suggest that it is this instinctive knowledge that causes the animal to advance his left horn. I have not noticed hitherto in other animals any ability to distinguish one side of the body from the other, unless educated by human beings. I should be glad to hear if this rudimentary knowledge of left and right in wild animals has been observed before.

168 Years' Pedigree: Veteran Stallion Dead.

Sudbourne Arabi, the famous Suffolk stallion, whose pedigree could be traced back in the male line to Crisp's horse foaled in 1768, has just died in Rutlandshire at the age of 24. Even greater than his own prize-winning record, which included a championship at the Royal, were the achievements of his progeny. His registered stock included over eighty stallions and over 100 mares, many of which were exported to the Colonies and other countries.

At the Sudbourne dispersal sale in 1918, the veteran stallion was sold for 525 guineas to Mr. H. D. Longe, of Abbots Hall, Stowmarket. The latter sold him subsequently to Captain C. F. Fitzroy, who used him with great success in his stud at Correy Weston, Bury St. Edmunds. When Captain Fitzroy sold his stud last year, Sudbourne Arabi was acquired for the Rutlandshire stud of Mr. Owen H. Smith, at Langham, near Oakham, where he died.—*Daily Telegraph.*

DIVISIONAL REPORTS.

Central Division.

A Meeting of Clinical Interest.

Proceedings full of interest for the clinician rewarded those who attended a meeting of the Central Division which was held at 10 Red Lion Square, W.C., on Thursday, May 3rd, 1928. Not only was there an excellent paper on "Specific Nephritis (?)" by Major Frank Chambers, to be discussed, but also a most interesting series of morbid specimens and cases of interest.

The Chair was occupied by the President (Captain W. K. Townson), and there were also present Captain A. Barr, Mr. W. Brown, Captain R. Bryden, Mr. H. E. Bywater, Major Frank Chambers, Lieut.-Col. P. W. Dayer-Smith, Mr. G. H. Livesey, Professor J. Macqueen, Captain G. Dunlop Martin, Mr. J. W. McIntosh, Major-General Sir John Moore, Mr. W. Perryman, Dr. A. L. Sheather, Professor A. R. Smythe, Captain R. J. Stow, Mr. E. L. Stroud, Mr. R. A. Willett, Professor G. H. Wooldridge, and Mr. J. F. Macdonald, *Hon. Secretary.*

Visitors.—Mr. A. J. Beeson, Captain H. S. A. Dunn, and Mr. J. S. Steward.

Confirmation of the minutes of the previous meeting was postponed, pending their publication in the *Record.*

The receipt of apologies for absence was announced from Mr. H. Bell, Dr. Tom Hare, Principal F. T. G. Hobday, Major H. Kirk, Professor J. McCunn and Captain W. Watt.

The Hon. Secretary informed the meeting that Dr. Juan E. Richelet, an Hon. Fellow of the Society, had kindly forwarded a copy of his recent work, "L'Industrie de la Viande en République Argentine." It was agreed that the best thanks of the Society be accorded Dr. Richelet for the work, and that it be presented to the Library of the Royal College of Veterinary Surgeons.

New Members.—Messrs. J. D. Haywood, of Golder's Green, and R. Scott, of Aldershot, were elected as Fellows of the Society.

Morbid Specimens and Cases of Interest.

Professor G. H. Wooldridge contributed three items to this section of the proceedings. [An account of his cases appears in the Clinical and Case Reports Section of this issue of the *Record.*—Ed.] They were (1) Cystic enlargement of the uterus and ovaries of a cat; (2) Tuberculosis of the eye and kidneys, etc., in a cat; (3) Ball wedged in the œsophageal foramen of dog's diaphragm: removed by gastrotomy.

Mr. W. Perryman: I also have three specimens to show you, two of which I think will prove of unusual interest to the Fellows of this Society. The first is a psammoma taken from the brain of a horse some two to three months ago. I was called to see this mare, which I had known well for a long time, and which had never shown illness for three years. The reason for my being called on the occasion in question was that she was supposed to have hurt her back. I diagnosed brain disease and, after treatment for a week or two, she greatly improved. She then fell ill again and eventually we had to have her destroyed. You will see two rather good specimens of psammoma. On opening them, I found them to contain sanguineous material and included in it was a large amount of brain sand. The condition of brain sand is said to be a calcareous deposition, more or less at some central nucleus. I believe it is very common in the human subject, in whom the same sort of deposit is found in the prostate. You will see two cords here: they look like strings, and they are the vessels proceeding from the choroid plexus.

The next case I have is of more than passing interest. This piece I am holding here is a portion of lung and the other is a thrombus. I knew the case thoroughly from beginning to end. The animal belonged to a one-horse firm, and I have been in attendance every time they required anyone and have known the mare for years. She was purchased on November 10th, 1921 and was destroyed on March 26th, 1928. She worked very well to begin with, but on June 6th, 1922, I was called to see the mare, as she was ill. She developed pneumonia very badly, and I treated her from June 6th to July 20th. She was in such a condition that I advised the owner that she was not worth keeping, as I believed she would develop gangrene of the lung. In spite of that, he did keep the mare and she was under treatment for six weeks, making a recovery, greatly to my surprise, and from that date until the day she was killed she never showed any signs of lung disturbance. I met the carman only this week and he told me he had worked the mare 3½ years and she had never lost an hour. The owner was rather keen that the mare should not pass into other hands and so he requested me to have her killed as she was quite worn out and going lame. The *post-mortem* was made within half-an-hour of that happening, so there is no question of *post-mortem* clot, and I think you will agree that the lungs are rather remarkable. When they were taken out they looked fairly healthy, but in the middle of the right lung one could feel a hard mass. There you will find that this hard mass was inside a vessel; it is a big thrombus.

The point I would emphasise is the importance of following out a case like this; also, the evidence provided by it of the recuperative power of the lung tissue. I think there is no doubt that this thrombus had been in existence for several years, yet the mare had no cough or any pulmonary disturbance. I should myself say it is a thrombus of one of the big veins, but it is very difficult to determine which. Had it been one of the arteries, I should have expected the collapse of a large portion of lung.

This next specimen is only an anatomical freak. In making a *post-mortem* on a leg a few weeks ago I found a mass of red muscular tissue between the perforatus and the perforans tendons, about midway between the hock and fetlock.

Dr. A. Leslie Sheather: The little specimen I have brought along is something of a curiosity, but I think it is rather a rare curiosity. It is not a very striking looking specimen, but it is part of a growth which was found in the chest of a dog. At first glance it looked like a very ragged fragile papillomatous growth, but one realised that you could not get that inside the chest.

I found on examining sections that it was a case of streptothrix infection—an infection akin to actinomyces infection—and in any one of the sections one can find two or three of the colonies.

The condition has been described before; in fact, I think the first case of streptothrix infection in the dog was described by Rivolta only three or four years after he described the actinomyces. It is a thing one does not come across every day. I am indebted for the specimen to Mr. Payne, of Weybridge.

Mr. H. E. Bywater: I have brought along a portion of a sheep's liver which has a growth on it. The specimen here is about half the original size, the other half having been sent to a laboratory for sections to be cut for microscopical examination and report. I brought it along to ask if any gentleman could enlighten my ignorance on the subject. I first thought it was a neoplasm, but on further examination I decided that there was something about it which did not seem typical of a neoplasm.

The subject was a sheep killed in the slaughterhouse for food. Apart from the lesion in the liver, the only abnormality was the presence of a few strongyles in the lungs.

Major Frank Chambers: I have brought here some somewhat bulky specimens—the heads of three dogs—to bear out my statement at the last meeting of the Society that the presence of cancer in the dog is on the increase. I saw these specimens between the hours of nine and ten yesterday morning, and they show cancer of portions of the face, and I think that when you examine them you will agree with me that they are cancer. The first case is a Bull bitch, nine years old, and she has got a very large breaking down—carcinoma—growing from the anterior fauces. It had been noticed for about two months. The owner found she used to bleed every time she drank, and he decided that she must be destroyed.

The next specimen is a 14-years'-old Pomeranian that was bred by the owner. I have known the dog for nine years. He has got a carcinoma of the lower maxilla. I did not attempt to operate—as recurrence would undoubtedly take place. The next is a six-years'-old Airedale with a sarcoma of one of the glands of the throat. The growth, you will observe, is so large as to cause considerable pressure on the larynx and trachea.

Mr. R. A. Willett: I have here two kidneys from a Chow which was brought to me with apparently nothing the matter with it except that it was very poor in the coat, which was very dry and harsh. The dog was left with me, and I found it had a pronounced thirst. When you see the kidneys you will realise the significance of this. The dog fed well and showed no other abnormal symptoms for two days, but on the third morning it died suddenly. On *post-mortem* the only thing found to be wrong was the condition of these kidneys. What the condition is I do not know.

The other specimen is a piece of bone which I took out of a cat's throat this morning. The bone had been *in situ* ten days and all that was noticed wrong with the cat was that there was a sore on the skin, with profuse granulation, just below the trachea, probably due to the cat scratching the part. The top end of the bone was showing and the rest was down the œsophagus, the piece of bone showing, protruding just by the trachea.

I removed the bone and the cat has since been able to eat quite well, though previously it could only take liquid food.

Discussion.

Captain G. Dunlop Martin: The subject that interested me most in all the specimens shown was that of the uterus of the cat, exhibited by Professor Wooldridge. It is an exceedingly interesting specimen and it appealed to me rather because of a female cat upon which I recently performed ovaro-hysterectomy. In that case the cornua were considerably thickened, although I was assured that the cat—a small animal—had never been out, while the ovaries were somewhat enlarged.

Major Chambers' cases, too, were very interesting, especially from the fact that all three occurred in one morning.

We were taught, not so very long ago, that cancer was a disease of middle age and old age rather than of youth, but in the last two years I have had two interesting cases myself. One was cancer of the buttock in a Mastiff, nine months old. I sent the growth to Professor Buxton at Cambridge, for histological examination and report and he returned it as true carcinoma. Within a few months of that case I had a seven-months'-old half-bred Pomeranian with a growth on one elbow, and that was also returned as a true carcinoma.

Professor G. H. Wooldridge: I was very pleased to see the specimens submitted by the younger members of the Society, as their keenness augurs well for its future—(hear hear), but I think perhaps one should first refer to the specimen of streptothrix infection submitted by Dr. Sheather. I have never previously seen anything like it in the dog, and I think that in the absence of histological examination perhaps the last thing I should have hazarded as to what it might be was what it actually proved to be. The photomicrograph is a particularly good one. *Re* Mr. Perryman's first specimen, his description of brain tumour does not conform with what I have previously encountered in brain tumours of the horse. They have nearly always been cholesteotomas, the deposit not being a calcareous substance at all, but consisting of cholesterin crystals.

Major Chambers' specimens are very interesting and this arm of coincidence is a very remarkable one; indeed, as I shall suggest later, it may account for some of the sequence of cases he has described in his paper. I myself have experienced it frequently; for instance, on the same day I have met with three cases of carcinoma of the thigh in different dogs, the lesion for which each was brought in being a wide, granulating ulcer. On examining deeply one could feel the external inguinal lymphatic glands to be affected, and in two cases the popliteal lymphatic glands.

With regard to the specimen submitted by Mr. Willett, I believe there is no doubt that the condition there is chronic interstitial nephritis.

If I might be permitted to make another remark concerning my own case of the cat, upon which I performed ovaro-hysterectomy, I am constrained to refer again to the fact that I operated on the middle line because there is a tendency to go back to the old method of operating in the flank in removing the ovaries. In many ways that method has something to recommend it, but it has the grave disadvantage that if, as in my case, you find it necessary to remove the uterus also, you are precluded from doing so through your choice of the flank site of operation. But

I would also say that I do not think in the flank operation that there is the slightest necessity to operate on both sides.

Dr. SHEATHER: In regard to Mr. Perryman's case, it struck me as being exceptional for one to find, in a vessel, a clot which was there for over two years and still capable of being cleanly enucleated from that vessel.

(Mr. PERRYMAN: It was there for over five years.) Dr. SHEATHER: That makes it even more remarkable. As to the clot being a complete one, that is a risky thing to say without microscopic examination, as in many cases one has seen vessels apparently completely occluded by clot, but nevertheless there have been channels through them, through which the blood can circulate.

The PRESIDENT: I would, on your behalf, like to thank those gentlemen who have brought forward these most interesting morbid specimens this evening. In particular, perhaps, out thanks are due to Major Chambers for bringing these heads such a long distance. (Applause).

We will now proceed to the consideration of Major Chambers' paper "Specific Nephritis (?)" I believe copies of the paper have been circulated to all the Fellows, so that, if it is your desire, we can carry on with the discussion, taking the paper as read.

The meeting agreed, on the proposition of Professor WOOLDRIDGE, seconded by Mr. MCINTOSH, and the President declared the paper open for discussion.

[Both paper and discussion are reproduced at the commencement of this issue of the *Record*.—ED.].

In the course of the discussion, the PRESIDENT proposed a very hearty vote of thanks to the essayist, and at the end of the discussion, in seconding the heartily-accorded vote of thanks which the President had proposed, Professor WOOLDRIDGE begged Major Chambers not to feel that the comparatively small attendance was due to any lack of interest in the subject on the part of the Fellows of the Society, for he was confident that it was accounted for by the fact that the paper had been circulated in advance to the Fellows, who thus thought that, by also reading the discussion upon it in the *Record*, they need not trouble to attend the meeting. He thought that newly-introduced practice was proved by their experience that evening to be a grave mistake. (Hear, hear). The paper had indeed been a most interesting one and he was sure that all present greatly appreciated the fact that Major Chambers had travelled so far to be present at its discussion. (Applause).

Major-General Sir JOHN MOORE supported all that Professor Wooldridge had said in regard to the diminution of the attendance consequent upon the circulation of the paper in advance. He thought it was very good indeed of Major Chambers to come so far to give them the benefit of his paper. He was sorry that he had not been able to join in the discussion because the subject was one regarding the dog, but he was reminded of the very large amount of nephritis that they had in France, associated with the ulcerative lymphangitis of Nocard. In the treatment of that disease they resorted to the kidneys and to the old lesions in the kidneys for the supply of the Priez-Nocard bacillus which was the cause of the ulcerative lymphangitis of Nocard and of the nephritis that was associated with it. Thinking by analogy, he was wondering if there was anything of a microbic nature in regard to the nephritis in the dog that the essayist had encountered, and it struck him that no mention had been made of a bacteriological examination of that condition.

Major CHAMBERS returned thanks for the kind way in which his paper had been received, and, replying to the point raised by Sir John Moore, said that in seven or eight cases destroyed, cultures were made from the blood, but not from the kidneys. They were made with negative results, except in three cases, in which streptococci were found, and the authorities did not think that they had anything to do with the condition. If he could persuade owners to send cases to the College the question would be gone into, but they knew how reluctant owners were to let their pets go.

The meeting terminated with the passing of a hearty vote of thanks to the President for his conduct in the Chair.

J. F. MACDONALD, *Hon. Secretary.*

Lancashire Division.*

ANNUAL MEETING AND DINNER.

The annual meeting of the Lancashire Division N.V.M.A. was held at the Adelphi Hotel, Liverpool, on Friday, March 16th, 1928. The Chair was occupied by the President (H. H. Aldred, Esq., M.R.C.V.S.), and other members present were Messrs. W. Ackroyd, F. A. Ball, J. W. Brittlebank, W. L. Cockburn, C. W. Elam, H. G. Hewetson, J. Holroyd, F. Hopkin, R. Isherwood, A. W. Noel Pillers, A. C. Shuttleworth, H. Sumner, J. Spruell, H. L. Torrance, J. H. White, W. Woods and J. H. Wright. *Visitors*: Messrs. J. W. McIntosh, H. J. Dawes and C. F. Wood.

Apologies for unavoidable absence were received from Messrs. J. Abson, J. T. Allen, E. J. Burndred, N. Brear, J. Barker, J. H. Carter, J. Clarkson, E. H. Curbishley, H. R. Hewetson, H. Holroyd, T. Eaton Jones, W. K. Johnstone, R. C. Locke, J. McKinna, P. Manuel, W. Noar, D. E. Orr, and J. Urmson.

The minutes of the last annual meeting were taken as read.

PRESIDENT'S ADDRESS.

The PRESIDENT then gave his address from the Chair, as follows:—

My first duty this afternoon is to thank you sincerely for electing me to the position of President, and no endeavour on my part will be wanting to uphold the standard set by my many distinguished predecessors in the chair of this old and influential Association, now merged as a Division of the National Veterinary Medical Association.

I am tempted, with your permission, to review, as far as is within my capacity, the chief events, as they strike me, which have marked the progress of the profession since I entered it in 1900. In attempting reviews of this character it is not always easy to maintain a proper sense of proportion, nor is it always easy to assess at their true value events which, to me as an individual, may seem to have had great influence on the general well-being and advancement of our calling.

I think, however, I shall have all of you with me when I say there can be no doubt that the past 30 years have been

* Received on May 7th.

years of continuous and uninterrupted advancement in every direction. Indeed, it would not be too much to say that this period has shown greater progress than any previous period since the passing of the Veterinary Surgeons Act, in 1881.

Somewhere within the period we are discussing has developed the true scientific appreciation of the necessity for a thorough knowledge, not only of our preliminary sciences, but also of pathology and all its allied branches. We have, for instance, realised within this century that our greatest service to mankind and the State, to say nothing of our animal patients, lies along the lines of preventive medicine.

The advances in veterinary education to which I have referred are so widespread and far-reaching, that it would be invidious on my part, in a short address like this, to attempt anything more than a bare reference to one or two of the more prominent features as they occur to me.

Let us take, for instance, the great advances which have been made in pathology and bacteriology alone, and we have a fertile field, in which, I think, we may congratulate ourselves in the number of diseases which have been brought completely under control. Glanders is extinct in this country. Anthrax occurs only in isolated outbreaks with which we know quite well how to deal, rabies no longer exists in the British Isles, pleuro-pneumonia and cattle-plague are likewise relegated to history. But we are still progressing and it is true that we have with us yet many scourges the attempt to solve which calls for the devoted and indefatigable labours of every one of us. Distemper in the dog is, I am hopeful, within the range of early solution, and I think we may say with confidence, having in mind the very excellent address delivered to us by Professor Maitland a short time ago on foot-and-mouth disease, that very marked progress has already been made in research into this disease.

It would, however, in my opinion, be true to say that the restrictions dictated by the requirements of the commercial position of our stock breeding industry may have interfered in no small measure with the solution of this problem. I do not mean when I say this that I quarrel in any way with the policy adopted in this country for the control of foot-and-mouth disease, for under existing circumstances I have no doubt that the policy of slaughter is best. But it has unfortunately resulted in a public belief that we, as a profession, are incapable of scientifically dealing with this scourge, whereas we, on the other hand, are content to assist in every way we possibly can the maintenance of our very important trade in the export of cattle.

Many problems remain with us and the fields before the research worker are ever widening. In addition to those diseases to which I have referred there are tuberculosis, contagious abortion (the biggest enemy the dairy farmer has to-day), the wide field of diseases affecting sheep, of which as yet we know but little, swine fever, swine erysipelas, dietetic and deficiency diseases and so on.

Before looking into the future of the profession, I should here like to express great appreciation of that great pillar of our profession, Sir John M'Fadyean, and wish he may have many years of happiness in his retirement. (Applause.) It is significant that the period of greatest progress should coincide with his period of greatest work for the profession.

It is very gratifying that the Council of the Royal College of Veterinary Surgeons, as the mouthpiece of the profession, has conferred on him the Honorary Associateship, the highest honour which the profession has to confer, and which has only been conferred on one other living English veterinarian, Sir Fred. Smith.

Now, what of the future? Our economic importance in the Public Health Service is already well established and cannot but extend in every direction, as, although this service has already proved its worth, it is but in its infancy, and here I may be permitted to say that, in my opinion, it is to be hoped that those responsible for the future development of this service will be persons possessing high qualities of statemanship and wide vision. It is to be hoped, for instance, that the Public Health Veterinary Service will not be allowed to develop into a restricted water-tight compartment having for its personnel but a few whole-time officers. The full development of its value can only come by an ample recognition that the whole profession should form part of this great service; the practitioner in the field, knowing the idiosyncracies of his various clients, will be much more capable of carrying the agriculturalist with him and so assist the whole-time officer in organising a service which will be not only of value to humanity, but also to the whole of agriculture.

The question of the milk supply, for instance, is very prominently before us to-day, and I venture to say that a complete Veterinary Service, organised on broad lines to include the veterinary practitioner carrying out systematic periodical examinations of our dairy herds, will do more to secure a safe milk supply, and reduce the incidence of losses to agriculture than any system which can be conceived, which does not include the experienced diagnostician.

It will be generally admitted that there is a wider and more general appreciation of the veterinary profession; it is now definitely accepted and looked up to as a scientific profession, and our medical confrères readily recognise us as their scientific equals.

I will now refer briefly to the politics of our profession. We have set up a great organisation in the shape of the National Veterinary Medical Association, of which we are a Division, and territorially a very important Division, and it must be our endeavour to see that no single veterinary surgeon within the area of our activities remains outside. Great strides as the Association has made, it is still very unsatisfactory to realise that not less than one-third of the members of the profession are still not members of the "National."

Lastly, I come to the Council of the Royal College of Veterinary Surgeons, a body of 32 members elected by the popular vote of the whole profession. To this Council falls probably the most serious responsibility for not only governing the profession itself, but also the shaping of professional policy. As a body they have been frequently open to criticism, and probably no similar body ever escapes criticism, but we must remember what they have done for us—they have carried the whole of the responsibility of furthering our interests, and are composed of public spirited men, whose only reward is the knowledge

and satisfaction of serving their profession, and I fear that many of us give but little thought to the time and money these gentlemen spend on our behalf. Personally, I pay my tribute to them, and would here only make a plea that, if criticism is to be levelled, it should be constructive, and not destructive.

I would like to take the opportunity of congratulating our old friend, an old member of this Division, Colonel Brittlebank, who is now occupying the Presidential Chair for the second year, an honour which we like to feel reflects, in some measure, on ourselves. (Applause.)

I would urge upon you the serious importance of joining our Societies which administer benevolence. The National Veterinary Benevolent and Mutual Defence Society has carried on a great work for a great many years; it is the only Defence Society in the profession, and none of us knows when he may have to face a charge of negligence in a professional respect. What law costs are in these cases, I can leave to your own imagination. In the administration of its benevolence it has been able to bring comfort to the homes of many deceased veterinary surgeons' dependents, whose lot otherwise would have been too painful to contemplate.

As an old London student, I wish to ask you all to assist, as far as is within your power, towards the re-building of the Veterinary College so as to make it not only worthy of the profession, but of the greatest city in the world.

I thank you for your patient hearing, and I look forward with confidence to your loyal support and have no fear but that we shall have a successful year.

I would ask specially the large number of young members we have got, to come forward with papers, and to take part freely in the discussions. No matter how small or unimportant their contribution may appear to them, it would probably remind some other member of some useful point. (Applause.)

A vote of thanks to the President, proposed by Mr. SUMNER and seconded by Mr. WOODS, was carried with acclamation.

The PRESIDENT expressed his thanks with suitable remarks, and at the same time proposed a vote of thanks to the retiring President, Mr. J. H. Wright, O.B.E., M.R.C.V.S., and office-bearers.

Major WRIGHT responded, and stated how much he was indebted to the Hon. Secretary and Treasurer for their valuable assistance.

The meeting then rose for the Dinner.

THE ANNUAL DINNER.

Subsequent to the meeting, the Adelphi Hotel served an excellent dinner to a large company. The Chair was occupied by the President (Mr. H. H. Aldred, M.R.C.V.S.), and the following members were present:—Messrs. W. Ackroyd, F. A. Ball, J. W. Brittlebank, W. L. Cockburn, C. W. Elam, H. G. Hewetson, J. Holroyd, F. Hopkin, R. Isherwood, A. W. Noel Pillers, A. C. Shuttleworth, H. Sumner, J. Spruell, H. L. Torrance, J. H. White, W. Woods, J. H. Wright, E. L. Butters, T. Dobie, F. G. Edwards, W. Fowle, P. T. Lindsay, G. H. Locke, H. T. Matthews, H. G. Rogers, F. S. Warburton, E. F. Wood, S. H. Gaiger, and J. T. Share-Jones. The guests included Dr. Hetherington (Vice-Chancellor, Liverpool University), Messrs. J. W. McIntosh, H. J. Dawes, J. Done, Alderman Muirhead, Professors L. R. Wilberforce, W. J. Dilling, Warrington Yorke, W. S. Patton, H. B. Maitland, L. S. Ashcroft, W. H. Roberts, and Macdonald, Messrs. H. V. Hughes, J. W. Thwaite, and C. F. Wood, Mrs. Aldred, Miss Ball, Mrs. Cockburn, Miss Dobie, Miss F. G. Dobie, Mrs. Edwards, Mrs. Elam, Mrs. Gaiger, Mrs. Hewetson, Mrs. Holroyd, Mrs. Hopkin, Mrs. Locke, Mrs. Matthews, Mrs. Pillers, Miss Taylor, Mrs. Torrance, Mrs. White and Mrs. Wood.

After the loyal toasts, Mr. J. W. McINTOSH (President of the National Veterinary Medical Association), in proposing "The City of Liverpool," said he believed Liverpool was a village of a population of about 5,000 at the beginning of the 18th century. A hundred years later the population had increased to somewhere about 80,000 and during the last 100 years the increase had been enormous, and the development of the city. He thought to-day the population was approximately 1,000,000, and, perhaps, outside of London it was the largest commercial and shipping centre in the world. To the outside world Liverpool was probably best known as the gateway of international trade between this country and Ireland, America, Mediterranean ports, the East Indies, and other large countries of the world. The city itself presented many external features not unworthy of its mercantile character, principally its docks. He understood it was a series of magnificent deep water docks extending the full length of the city, probably unequalled by any seaport in the Kingdom. The sight of those docks, bristling with masts and funnels and the scene of loading and unloading, gave one a very great indication of the enormous amount of trade which passed through the port. Liverpool's streets and buildings were not without interest and were features of architectural beauty.

As a city of learning, Liverpool took her place even down to her veterinary school, which was something to be said for Liverpool. In the conduct of her affairs the Corporation of Liverpool had been very fortunate in her municipal rulers. They were fine men of wide outlook, intellectual ability, and sound understanding, and so long as they found men of that character so long might they hope for the progress of the city to continue. They had present a representative of the Corporation of Liverpool in the person of Alderman William Muirhead, J.P., (applause), and he would take that opportunity, on behalf of the profession, of congratulating Alderman Muirhead on the high dignity of his office, and the respect and esteem in which he was held by the citizens of that city. Voluntary service in that capacity would always stand out on the skyline of public duty and was one of the great traditions of their country. Liverpool was famed for the class of animal, particularly horses, that was seen in the city. (Applause.) He was told by the representatives of the veterinary department that they were the finest horses in the Kingdom.

Alderman MUIRHEAD, in responding, said he was very proud of his native city and he had seen the enormous amount of progress that Liverpool had made. He claimed that greater progress had been made in Liverpool than in many other cities. In regard to the question of milk, wonderful strides had been made in its care and attention,

from what it was in days gone by. He ventured to say that the increased care they were taking with milk was going to give the veterinary surgeons more business than they had had before. They were exceedingly proud of their horses, and he threw out a challenge to all the world that no city or town in the world could produce such horses for a show as they had in Liverpool. He would invite them, as strangers, to come to Liverpool and see their May Day parade of horses, and if they could find anything better he would be very much surprised. Their chief veterinary officer for Liverpool, Mr. T. Eaton Jones, was unable to be present on account of illness, but he would like to compliment Mr. Jones.

Professor WARRINGTON YORKE, in proposing "Veterinary Science," said that nobody, not even the President of the Royal College of Veterinary Surgeons, had higher ideals for the veterinary profession than he had. He believed there was a great future for veterinary science. It was rather remarkable that the people of this country had been so slow to realise the great economic advantage to the Empire of a highly-organised veterinary profession—(hear, hear), but he believed there were definite indications that they were now appreciative of that fact. He thought that a toast of that sort should include that of the Liverpool School of Veterinary Science. He had watched that school ever since its inception, sympathetically through its struggles and vicissitudes in its early existence. He believed in the future of that school; it had many advantages, it was a great advantage to be part of a University and to be associated with a powerful school of tropical medicine. It had almost unique advantages and they were working hard for that school, but all their work would come to nothing unless they had the cordial and active co-operation of the veterinary surgeons. With their assistance they could make the school one of the leading schools in the country; they could make it a centre of veterinary learning, a place at which research would be pursued, and which would enhance the glory of veterinary science. He believed they of the University could count on their sympathetic and active co-operation. They were delighted to see Lieut.-Colonel Brittlebank occupying such a distinguished and proud position as the President of the Royal College of Veterinary Surgeons—(applause), and he was delighted to couple with the toast the name of Lieut.-Colonel Brittlebank.

Lieut.-Colonel J. W. BRITTLEBANK, C.M.G., in responding, said at one time it was customary for them to sit at the gate and supplicate the help of the passer-by to help a little profession that was rather outside the pale; he was proud to say that to-day he thought the profession had arrived and had justified its existence and would continue to do so by not only service to man, but to the agricultural industry of this country, in a manner of which they could ill conceive at the moment. He thought veterinary science in this country would be somewhat gratified when the report of the Lovatt Committee was published; he had no definite reason for saying that, but within the last two days there had been issued a white paper which he had been able to look through that morning, the report of the Committee which was appointed after the recent colonial conference to inquire into agricultural research. There was a very striking paragraph in that report; it was that they were recommending, after consultation with the Veterinary Committee, to bring all the specialised services to the same level or otherwise to recognise, amongst others, the veterinary service as being a scientific service which had a soul of its own in the future. Veterinary service in many of their colonies had been relegated to a very secondary position, but when they remembered the services that the veterinary profession had rendered in carrying the flag to the distant parts of their Empire it might well be that they were justified in feeling hurt at the frequently humble position given to the veterinary administrator, on whose efforts the whole future of a colony probably depended. They also knew that in the African colonies, particularly, cattle were the native banks, that the possession of cattle was equal to the deposited money in their own banks, and that the clearing up of the many scourges that decimated the herds and flocks which were the means of livelihood to those natives had made possible a reasonably decent existence for the native population of those particular colonies and dependencies. So impressed were the members of the Lovatt Committee with some of the evidence prepared that they invited the Royal College of Veterinary Surgeons to submit a historic survey of the part which veterinary science had played in the development of their Dominions. Their able Secretary (Mr. Bullock) had prepared a statement which was by no means complete, yet which, when it was complete, would make every member of the veterinary profession extremely proud to belong to it. He thought the future of the profession could well take care of itself. They meant to maintain their one portal of entry. He believed there was a great future in front of the Liverpool school, and what was wanted was the loyalty of the profession to that school, and he felt sure that the members of the profession in the North-West of England would do everything they could to foster that school.

He regarded Alderman Muirhead as one of the great leaders of public life in the North of England, and Alderman Muirhead had been extremely fortunate in that he had in Liverpool a veterinary department of which any city might well be proud. Liverpool had set an example to other cities which they hoped they would follow and might try to imitate, but they would have great difficulty in living up to the standard that had been set in promoting that great industry, the breed of the great Shire horse. He himself felt no little pride in the department presided over by his friend, Mr. Eaton Jones. The profession found itself in a very difficult position. The Royal College had no kindly old ladies that left it money for the promotion of veterinary science. Those people believed that they were exponents of that much decried art, vivisection, and that they were nothing but a bunch of cruel busy-bodies. If some Goddess could come down and educate these dear old ladies of both sexes (laughter) to leave their money in the interests of true humanity a great work would be achieved, because he believed there was no more damnable thing than to allow an unskilled charlatan to deal with a dumb animal, as was being done all over England to-day and under the patronage of persons in high places. He felt very strongly about it, because they were really concerned with the true humanitarian treatment of their lower animals, and they wished

to see them protected from the malpractices of those adventurers who simply lived on the charity of the old ladies who were ready to dole out to the first smug adventurer who liked to hold forth. He had a great confidence in the future of the profession. (Applause.)

Major J. H. WRIGHT, O.B.E., in proposing "The President," said Mr. Aldred was a very keen veterinary surgeon, an agriculturist of no mean ability, and a good judge of bloodstock.

The PRESIDENT responded in suitable terms.

Professor S. H. GAIGER, in proposing "Our Guests," said Liverpool knew how to get together one of the best veterinary departments in the country and had shown that, after getting hold of the best men, it knew how to keep them. He felt that other cities might take a leaf out of Liverpool's book in that respect.

Dr. H. J. W. HETHERINGTON (Vice-Chancellor of Liverpool University), in responding, said he wanted to speak of the relations of the University to the veterinary profession. There had been for some years a veterinary school in the University, which was the only veterinary school which formed part of a University. They were on the eve of a very considerable development of that school, a school of veterinary science, which was not easily accessible to a hospital and obviously it suffered from a good deal of disadvantage. They had been able to overcome that handicap, thanks to the kindness of various members of the profession in Liverpool, and they had actually begun the building of a veterinary hospital. They were not able to pay for it, but with that optimism that distinguished universities all over the country they had begun to build and they hoped they would be in occupation some time early next winter. They realised that the existence of that hospital made it even more necessary than it was before for them to have the cordial co-operation of the members of the veterinary profession in Liverpool, and in the vast area adjacent to Liverpool, and the counties round about, because it was from the practitioners of that area that they could hope to draw the clinical material that the hospital would require. They were not ignorant, and they had not overlooked the fact that the relations of that hospital to the veterinary practitioners of the area was a matter that would require consideration and discussion, for it obviously touched their interests in a very important and definite way. They had considered what in their view that relationship should be, and they hoped shortly—sometime next term—to be in a position to communicate to the practitioners of the area what those views were and to invite their observations and suggestions on them. They did not propose themselves—he wanted to make it quite clear—to come to any decision on that matter until they had had the advantage of the advice and the experience of responsible practitioners of that area and until they had consulted as fully as possible with them as to the way in which they and the new hospital could be of service one to another. That new relationship did present some interesting and possibly difficult problems, but they had to ask the assistance of the practitioners in giving them the material. He wanted to suggest that on the veterinary surgeons' side they had a good deal to gain from the existence of that hospital and from the veterinary department of the University, just as they, on their side, had much to gain from co-operation. He wanted to suggest that one of the most powerful reinforcements that they could have was the securing for their profession due recognition of its importance and educational qualifications. He thought it was a mark of the higher standard of the veterinary profession that there was now a school of veterinary studies in Liverpool, and from the wider point of view it was for them to maintain that department, which was the first, but probably not the last, University recognition of the importance of the veterinary profession.

Mr. JOHN DONE, also responding, said he was the first producer of Grade A milk that supplied milk to Birkenhead. That was only three years ago, and now he thought practically every prominent dairy in Birkenhead was a large conveyor of Grade A milk. He would like to congratulate Liverpool and Manchester in the great strides that had been taken in the milk supply of those cities.

Professor L. R. WILBERFORCE proposed "The Ladies," which toast was responded to by Mr. E. L. BUTTERS.

During the evening the company were entertained with songs by Mr. J. T. Williams, while the humour of Mr. Alfred Hassall added much to the enjoyment of the occasion. Mr. E. Watkinson, A.R.C.O., very ably carried out the duties of accompanist.

JOHN SPRUELL, *Hon. Secretary.*

The National Horse Association of Great Britain.

ANNUAL MEETING.

[We reproduce the following reports in view of the importance and interest to our members of the Association's efforts to maintain the position of the horse in social and industrial life, and also because of the support officially accorded the organisation by the N.V.M.A.]

Sir Walter Gilbey, Bart., took the Chair at the recently-held annual general meeting of the National Horse Association. In submitting the report of the year, Sir Walter stated that as a result of opening the membership of the Association to private individuals, the Association had now a membership of 130 and new supporters were continually being enrolled.

SLIPPERY ROADS. The preliminary report of the Slippery Roads Committee had been published and extensively circularised, and he could assure members that the whole question of the present slippery condition of the roads as affecting horses and cattle was being very seriously and carefully gone into. The Committee were at the present time engaged in making personal inspections of roads in all counties which had been recommended as non-slippery to horse traffic.

Members present at the meeting made various suggestions for consideration, while details of other roads would be sent to the Committee. Major Bishop, supported by Mr. Perryman, urged that the County Councils should be asked to lay a thick layer of grit on each side of the road extending about two feet from the side. Mr. Holleyman thought that in due course an enquiry might be made into the question of shoeing.

CAMPAIGN TO ENCOURAGE THE USE OF THE HORSE FOR TRANSPORT. The members present expressed their pleasure at the success that had attended the inauguration of this campaign, and it was resolved to maintain activities in 1928.

SILVER MEDALS. Twenty-three Agricultural Societies had intimated their intention of offering the Association's Silver Medal in their Children's Riding Classes.

The report was unanimously adopted on the motion of Sir Walter Gilbey, seconded by Sir Lees Knowles.

COUNCIL. The meeting decided that in view of the extended and increasing scope of the Association's activities, it was desirable that the Council should be reconstituted to include not only delegates from the Horse Breeding Societies, but also representatives of the kindred Associations, private members and firms.

The following gentlemen were thereupon appointed to consider the whole question, *viz.*, Sir Walter Gilbey, Bart., Mr. Cecil G. Argles, Mr. Nigel C. Colman, M.P., Sir Lees Knowles, Bart., and Sir Archibald Weigall, K.C.M.G.

TOTALISATOR. A general discussion then took place as to the possibility of the Totalisator becoming law, and whether any proportion of the proceeds would be allocated towards horse breeding generally. The Secretary was instructed to keep the Council advised as to the progress of the Bill now before Parliament.

Among those present were Lord Mowbray and Stourton, Sir Lees Knowles, Bart., Sir John Moore, Mr. Nigel C. Colman, M.P., Colonel J. W. Bishop, Captain E. T. Morris, Miss Tompson, Mr. F. L. Birch, Mr. G. Holleyman, Mr. Bertram W. Mills, Mr. C. H. Moore, Mr. W. Perryman, and Mr. A. B. Charlton.

. . . . . .

At a meeting of the special sub-committee (appointed with power to act by the members present at the last annual general meeting) the Secretary read the terms and purport of the Committee's appointment, viz.: To reconstitute the Council so as to include not only delegates from the horse breeding societies, but also representatives of the kindred associations, private members and firms.

1. President. On the motion of Sir Archibald Weigall, seconded by Mr. Argles and carried unanimously, Sir Walter Gilbey, Bart., was elected president for the year. 2. President Elect.—The question of the election of a president-elect was referred to the Council when constituted. 3. Treasurer.—On the motion of Mr. Argles, seconded by Sir Archibald Weigall, Sir Walter Gilbey, Bart., was elected treasurer with a permanent seat on the Council. 4. Council.—On the motion of Sir Walter Gilbey, seconded by Mr. Argles, it was decided that the following gentlemen be invited to serve as the nucleus of the first Council of the Association under the new constitution, viz.: Mr. Cecil G. Argles, Capt. J. Bailward, Col. F. Barker, Mr. Nigel C. Colman, M.P., Mr. W. J. Cumber, Mr. F. W. Griffin, Sir Lees Knowles, Bart., C.V.O., O.B.E., Lieut.-Col. Percy Laurie, C.B.E., D.S.O., Mr. A. MacNeilage, Lord Mildmay of Flete, Mr. F. J. Rawle, Mr. R. S. Tilling, and Sir Archibald Weigall, K.C.M.G. The above gentlemen to serve on the Council for a period of three years, and to be eligible for re-election. 5.—The Committee decided that the Council should have the power of co-opting a member to the Council or to any of the committees for a period of three years.

6.—The Committee decided that every horse-breeding society, now a member of the Association, should have the power to elect one member to the Council for a period of three years, and to be eligible for re-election on the nomination of the Council of the breed society that he represents. Any horse breeding society joining the Association in the future to be allowed one representative to the Council on similar conditions. 7.—The Committee further decided that every associated society paying not less than £5 5s. per year to have one member of Council under conditions applying to representatives of the horse breeding societies. 8.—Any associated society joining the Association in the future to be allowed one representative, providing a subscription of £5 5s. per year is paid. 9.—Under motions 6 and 7 the following societies were, therefore, invited to nominate a member of their society to the Council: Horse Breeding Societies—The Arab Horse Society, Association for the Improvement of New Forest Ponies, British Percheron Horse Society, Clydesdale Horse Society, Exmoor Pony Society, Hackney Horse Society, Hunters' Improvement Society, National Pony Society, Shire Horse Society, Suffolk Horse Society, and the Thoroughbred Breeders' Association. Associated Societies (assisting the publicity campaign)—Amalgamated Society of Farriers and Blacksmiths, Association of Retail Corn Dealers, British Hay Traders' Association, Central Veterinary Society, Master Saddlers' Federation, National Association of Corn and Agricultural Merchants, National Farmers' Union, National Leather Goods and Saddlery Association, National Veterinary Medical Association, and the Worshipful Company of Saddlers, and National Master Farriers.

Bovine Tuberculosis.

THE WORKING OF THE ORDER.

In the course of a report presented to the Aberdeen County Council, Mr. George Howie, F.R.C.V.S., Chief Veterinary County Inspector, says:—

"From February 27, 1926, to December 31, 1927, 252 cases of suspected tuberculosis were notified under the Tuberculosis Order, 1925. Of these, 226 cases were slaughtered and a *post-mortem* examination made on each case to ascertain the extent of the disease and indicate the compensation due. Of the 226 animals disposed of, 215 were suffering from advanced tuberculosis; this result indicates that these bovines were dangerous disseminators of the disease. Although the present method of administering the Tuberculosis Order will not succeed in eliminating the disease, there must be less chance of gross infection because of the removal of the animals most noticeably affected.

"It is, unfortunately, not sufficiently realised that cases of suspected tuberculosis should be reported to the Local Authority, and in most cases those that are reported are ones where the disease is so far advanced that it pays the owner better to report them than to either sell them or have them sent to a knackery.

"The valuation and the compensation paid for slaughtered animals up to the end of 1927 are facts which show that farmers are delaying too long before reporting cases. Out of 226 animals slaughtered 144 were valued at £2 5s. each, and 200 were paid £2 5s. compensation. Many were not worth the compensation paid as they were *in extremis* when seen, and some latitude should be allowed to the valuator so that he might be able to value those animals which are obviously dying, at a lower rate.

"Many farmers do not yet understand that they are liable to a penalty for failure to report a case of tuberculosis, and some believe that only cows have to be reported. It might therefore be advisable to issue a small pamphlet indicating that all bovines suffering from tuberculosis and showing certain definite symptoms have to be reported.

"More than one animal has been slaughtered at the same farm at different periods, but there was no proof that the disease had been contracted from the one previously slaughtered. In all cases, with the exception of two, the animals had been brought in after the first outbreak."

. . . . . .

Mr. R. Simpson, Chief County Veterinary for Cumberland, states in his report for the quarter ended March 31st, 1928, that during the quarter, 64 notifications of tuberculosis have been dealt with. The number includes two cases carried over from last quarter. In 42 cases slaughter has been authorised and carried out, and in each case tuberculosis was found on *post-mortem* examination. The number slaughtered in the corresponding quarter of last year was 44. *Post-mortem* examination showed that in 12 of the cases (28.75 per cent.) the disease was not advanced, and in 30 cases (71.25 per cent.) the disease was advanced. The animals slaughtered were valued at a total of £281 10s., the average valuation being £6 14s. The total compensation payable amounts to £142 7s. 6d., the average compensation being £3 7s. 9d. The Local Authority's share of the compensation amounts to approximately £35 11s. 10d., to meet which there is available the sum of £62 14s. 9d., recovered from the salvage. In addition to the above, one animal was slaughtered by the owner without compensation, and three animals died before an examination was carried out. No expense was incurred in connection with the valuation of animals slaughtered. 1,643 animals

were examined in connection with the Order. At the end of the quarter three cases still remained to be dealt with.

. . . . . .

At a meeting of the Executive Committee of Aberdeen County Council, the Clerk reported that since last meeting twenty-six cases under the Tuberculosis Order, 1925, had been reported, and nineteen had been dealt with. The total valuation was £75 5s.; the compensation paid, £60; and the salvage money, £18 15s. 2d.

Mr. W. Valentine, Kintore, thought the valuation should be much higher than it was. According to the Order, the valuation was based on the market price of the animal, which might be obtained from a purchaser who had no knowledge of the existence of the disease, except such knowledge as might be obtained from an inspection of the animal. If a dairy animal was worth £40 and was suspected of being tuberculous, its valuation should be £40. If it was then slaughtered and found to be free of tuberculosis, the farmer should be paid £40. If it had tuberculosis and the carcase was wholly condemned, he would get the minimum figure of £2 5s. He thought the whole Order required to be overhauled.

The Chairman said that Mr. Valentine could bring up a motion on the subject at a future meeting.

The Chairman (Mr. H. D. M'Combie, convener of the County) submitted the following motion:—

That in respect that it appears from the report of the county veterinary inspector that many cases of tuberculosis are not reported to the police or to a veterinary inspector as required by the Tuberculosis Order of 1925, the clerk be instructed to prepare a leaflet drawing attention to the requirements of the Order and to have this circulated by the police amongst owners of stock in the county, with an intimation that unless the required notice is given without unavoidable delay, the local authority will be under the necessity of prosecuting the offenders.

Mr. M'Combie said that it came out very markedly from the report and from the valuation paid that the cases were too late in being reported. The object of the Order was not being attained for all the money they were spending on it.

The Earl of Caithness seconded the motion.

Mr. Valentine moved a direct negative. As far as he could see no one could say when an animal had tuberculosis. How on earth were they going to start to prosecute when a scientist took six weeks to know if an animal had the disease? It was the height of absurdity.

Mr. J. A. D. Pirie, Castle of Auchry, seconded, and said he thought it was just another stick above the stockbreeder. They had plenty of regulations already without another being added.

The Chairman said the last clause of the resolution was a warning.

It was agreed that the leaflet should be sent out, but that the clause referring to a prosecution be deleted.

. . . . . .

The West Riding Agricultural Committee, having considered the report of the Chief Veterinary Officer on matters affecting the working of the Tuberculosis Order, are of opinion that the Order should be amended so as to minimise the financial loss to the owners of a certain class of cow which is found to be suffering from tuberculosis of the udder or giving tuberculous milk.

They are of opinion that the risk of financial loss is a deterrent to owners in reporting these cases.

The Committee recommend that representation be made to the Ministry of Agriculture and Fisheries for an amendment of the Order so as to provide for the payment of compensation at not less than three-quarters of the market value in the case of animals slaughtered under the Order as the result of suffering from tuberculosis of the udder or giving tuberculous milk.

NOTES AND NEWS.

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events.

May 29th—Meeting of the North Midland Division at Sheffield.
May 30th—R.C.V.S. Voting Papers to be returned.
June 4th—Meeting of Editorial Committee N.V.M.A., 4-30 p.m.
June 7th—Annual General Meeting, R.C.V.S., 12 noon, at 10 Red Lion Square, to be followed by Annual General Meeting of the Victoria Veterinary Benevolent Fund. Formal opening of R.C.V.S. Library by the Rt. Hon. Col. L. S. Amery, Secretary of State for the Colonies, 3 p.m.
June 8th—Meeting of the Central Division at 10 Red Lion Square, W.C.1.
July 4th—R.C.V.S. Annual Dinner, Hotel Victoria, W.C.2.

New Forest Ponies: Action by the N.V.M.A.

In further reference to this question, which was dealt with in our correspondence colums last week, we are glad to inform our readers that a sub-committee of the "National" has the matter in hand and, as a preliminary step, has sent the following letter to the Verderers of the New Forest:—

[*Copy.*]

Montague Chandler, Esq., 21*st May*, 1928.
Clerk to the Verderers,
Abbey Water,
Romsey,
Hants.

Dear Sir,

The National Veterinary Medical Association has read, with regret, the announcements which have appeared in the Press concerning the suggestions the the New Forest Ponies are improperly fed and cared for, and I am to inform you that the Association would be glad to give, voluntarily, any assistance in its power to the Verderers in the investigation of the conditions alleged to exist, if such assistance would be welcome.

The Association feels that the Verderers would prefer to have the advice of acknowledged experts in the matter, rather than the empiric assistance of bodies who, although possibly acting from the best of motives, lack that professional training and knowledge which are imperative to an investigation of this kind.

I am to say that, in the event of your Council entertaining this proposal, the Association would be pleased to arrange for a representative to meet the Verderers on a date suitable to them to discuss the method of procedure to be adopted.

Yours faithfully,

J. W. McIntosh, *President.*

To the foregoing letter from the Association, the Clerk to the Verderers has replied as follows:—

[*Copy.*]

Clerk's Office
Abbey Water,
Romsey, Hampshire.
22nd May, 1928.

Dear Sir

Thank you for your letter of yesterday's date regarding the announcements which have appeared in the Press concerning the suggestions that the New Forest Ponies are improperly fed and cared for. No doubt you have seen the joint letter in the Press written by the various New Forest Associations contradicting these announcements.

At a Court of Verderers of the New Forest, held on the 14th instant, these matters were fully investigated when the Verderers found that the statements were unfounded. I have already been in communication with the R.S.P.C.A., and the Chief Secretary has written to me stating that the Report made by Inspector Turner, of Lymington, which appeared in the Press, was not accurate.

Whilst much appreciating the kind suggestions made in your letter the Verderers are confident that there is no need whatsoever to further investigate the conditions alleged to exist and which as already stated have no foundations whatsoever.

At the next sitting of the Court of Verderers I will certainly bring to their notice your kind offer of assistance.

Yours faithfully,
MONTAGUE CHANDLER, A.M.,
Clerk to the Verderers.

J. W. McIntosh,
President,
National Veterinary Medical Association,
10 Gray's Inn Square, W.C.1.

PERSONAL.

Will.—Sanderson, Mr. Fred, of Feetham, Darlington, Durham, veterinary surgeon (net personalty £616), £5,644.

. . . . . .

Veterinary Surgeon's Jubilee.—"Congratulations have been extended to Mr. William Findlay Houston, M.R.C.V.S., St. James Street, Paisley, who has attained his jubilee as a veterinary surgeon." says the *Paisley and Renfrewshire Gazette* of 28th April.

"This week a number of relatives and friends waited on Mr. Houston at his house, and presented to him a gift.

"During the 50 years of his professional life, Mr. Houston has spent the greater part of it in Paisley and neighbourhood. As a veterinary surgeon, he is acknowledged as a capable and experienced practitioner, and holds a number of public appointments in Paisley and the surrounding district. He is esteemed by all and has a wide circle of friends."

. . . . . .

Retirement.—"Many Chiswick residents, especially animal lovers, will be sorry to hear of the retirement of Mr. George Rugg, the well-known veterinary surgeon who left for Kent yesterday, after over forty years' practising in Chiswick," states the *Brentford and Chiswick Times* of 11th May. "For twenty years Mr. Rugg has lived in Thornton Avenue, and for a like period he practised in Turnham Green Terrace. Some time ago he felt the work was becoming a little too much for him, and began to look round for some quiet place to retire to. He found the ideal spot in Kent, in a little village near Ashford, called Great Chant. We hope he will live to enjoy many years of peaceful comfort there."

. . . . . .

Appointment.—Mr. F. H. Manley, B.V.Sc., M.R.C.V.S., of Southport, has received an appointment at Vom, Nigeria.

Mr. Manley, after studying in the School of Veterinary Science, Liverpool, proceeded to Uganda on research in the field on animal diseases, and as a veterinary officer under the Colonial Office for the last two and a half years he has done meritorious work.

Mr. Manley, who is home on leave, will proceed to Nigeria in July.

OBITUARY.

PRUDAMES, ERNEST ALFRED, M.R.C.V.S., of 27, Marlowes, Hemel Hempstead, Herts. Graduated, London, May, 1892. Died, May 18th, 1928. Aged 57.

"ROBBING PETER TO PAY PAUL."

Under the above heading, a writer in the *Northamptonshire Evening Telegraph*, says:—

"Mechanisation and equine mobilisation appear to be tying the Army into knots. Only a few weeks ago the fiat went forth to "axe" the Veterinary Corps, and in the Territorial Army whole units were disbanded—but apparently disbanded ahead of the horses. Now the S.O.S. has gone forth for men to re-staff the Veterinary Corps, and voluntary transfers are invited from any branch of the Service.

"The appeal is surprising enough, and certainly suggests mismanagement, but even if justified, why appeal for recruits from any branch of the Service? Surely there are sufficient cavalry men, not yet made mechanics, who could be spared for this service without spending money to train more men to look after horses which officially are supposed to be progressing to the scrap-heap."

UNIVERSITY OF LONDON ANIMAL WELFARE SOCIETY.

A public meeting will be held at King's College, London, at 5-30 p.m., on Thursday, May 31st, on the subject of "Man's Duty to Animals." The meeting has been arranged by the University of London Animal Welfare Society, a body which has been formed with the object of enlisting, on behalf of fair play for animals, the influence of university men and women, in foreign as well as British universities. The speakers on this occasion will be Rabbi Dr. Samuel Daiches, The Rev. B. G. Bourchier, Father Martindale, S.J., Lieut.-Commissioner Unsworth (Salvation Army) and Dr. W. R. Matthews (Professor of the Philosophy of Religion at King's College). The Chair will be taken by Professor Hobday, Principal of the Royal Veterinary College, who is President of the Society.

ARMY VETERINARY SERVICE.

LONDON GAZETTE—WAR OFFICE—REGULAR FORCES.

May 18th.—The follg. Capts. to be Majs. (Mar. 26)—T. Hodgins, with seniority Feb. 1, 1927, and precedence next below W. L. Sinton, and remains secd.; W. D. Connochie, with seniority Jan. 10, and precedence next below K. S. Simpson.

Capt. E. O'Kelly is restd. to the estabt. (Apr. 17); Lt. A. P. MacDonald is secd. for duty with the Sudan Def. Force (Apr. 17).

REGULAR ARMY RESERVE OF OFFICERS.

Maj. A. N. M. Swanston, having attained the age limit of liability to recall, ceases to belong to the Res. of Off. (May 7).

Live Stock Exports.

"The export demand for British live-stock has been uncertain and, at best, only moderate in the past few years, but it would appear to be reviving in a manner that may foreshadow larger business in the near future," says the Agricultural Correspondent to *The Times*. "Stockowners in all countries seem to have been moving cautiously for some time back, in order that they might be able to grasp more clearly the course things were likely to take when the disturbances of a restless period were over. Home breeders are proceeding carefully, but there are signs of returning confidence. It is the same abroad. The comprehensive shipments which Messrs. J. Thornton and Co. have made recently would imply something of the kind. They have sent a Hereford and a Shorthorn bull to Spain, and a Lincoln ram to the same country; two Sussex bulls to Peru; a Jersey bull and a Shire stallion (with two Springer Spaniels) to Colombia, and several large white gilts and boars to Italy. The beneficent influence of British breeds is recognised in many countries, and the importers, as these particulars show, are afforded a wide choice of breeds and types."

French Ministry's Experiment to Improve Live Stock.

A Voronoff monkey gland farm is to be established in Lebanon to improve live stock, according to an announcement by the French Ministry of Agriculture, which also states that the necessary credits have been asked for the purpose.

A beginning will be made with the rejuvenation of goats and sheep, which will then be distributed among private farmers for breeding purposes.

The scheme (says the British United Press) is the result of the success of the Voronoff farm in Algeria, which has done much to restore the vitality of farm stock rendered anæmic by the climate.

Clean Milk.

Addressing the Carlisle Rotary Club, Mr. R. Simpson, County Veterinary Officer for Cumberland, said that the development of the sale of graded milk had been slow and was attended with considerable difficulty. Producers of such milk had not received the encouragement which they deserved, principally owing to the apathy of the average consumer and to the failure to make people realise the dangers of dirty, contaminated, and tubercle-infected milk. The present system of selling any kind of milk at a flat rate was unfair to all concerned. In his view, the selling of milk according to its chemical and hygienic quality was the only way to reward the best producers and at the same time to supply the public with a known quality, associated with a price according to its quality. Such an idea of grading seemed to him to present no insuperable difficulties. After all, it was exactly what happened with every other article of commerce.

CORRESPONDENCE.

Letters to the Editor should reach the Office not later than by the first post on Tuesday morning for insertion in following Saturday's issue.

All correspondence must bear the name and address of the contributor for publication.

The Editor does not hold himself responsible for the opinions of his correspondents

Veterinary Surgeons and the Law.

To the Editor of The Veterinary Record.

Sir,—Coke, *upon Littleton*, describes law as "the perfection of reason," so that it is hard to say what different men's interpretation of it will be, for perhaps few men are capable of exercising "the perfection of reason."

One remark of Major F. Taylor's in the discussion on Major Duncan's paper seems to call for comment. It is: "There was a case, some time ago, of a dog contracting lice in veterinary kennels, and the client *successfully* (italics are mine) sued the veterinary surgeon for negligence." I am afraid this is an *obiter dictum* and not good law. It would be interesting if Major Taylor would look up and give particulars of this case. Personally, I do not believe that any veterinary surgeon could be successfully sued because a single dog that was, or had been, in his kennels had lice (unless, of course, there were some duffers on the Bench).

Being personally and individually concerned, I remember and can quote chapter and verse for a veterinary surgeon being sued for negligence at the instigation of an indiscreet R.S.P.C.A. inspector, because a dog was stated to have lice that had been in his kennels. The verdict, however, was given in favour of the veterinary surgeon, the case was stopped and dismissed, and costs were given against the R.S.P.C.A. Even "the perfection of reason" was in no way necessary to settle this case; the only reason that was prudent and valuable was to be a member of the National Benevolent and Mutual Defence Society.

As regards a horse that has been operated on for roaring, I am afraid it would be risky to pass it as sound. It would be better to tell the prospective buyer, if you did not overlook the scar, that it had been operated on. In days when horse practice was more prevalent than it is now, many good auctioneers had a saving clause in their catalogues which ran: "horses that have been unnerved do not answer to the description of sound." I think that probably a roarer that had been operated on might come under this category also, but it is a matter for "the perfection of reason."

I do not understand why any notice at all should be taken of a man who threatens dire penalties because a dog had had distemper two years ago. Surely, "the perfection of reason" should indicate that a dog may have distemper half-a-dozen times.—Yours truly, G. Mayall, M.R.C.V.S.

An Efficient Lubricant.

To the Editor of The Veterinary Record.

Sir,—The value of an oleaginous lubricant during difficult parturition, is, I believe, common knowledge amongst members of the profession, and as the result of my own experience of a lubricant, I wondered if it was as commonly used in the veterinary profession as in the medical—*i.e.* "K.Y." lubricating jelly.

I must admit that up to a few months ago I had never heard of it, but since then I have used nothing else, in suitable cases, viz.:—(1) Both before and after removal of after-births, first to lubricate and then to endeavour to neutralise the unpleasant odour after washing and drying; (2) during difficult parturition, as an antiseptic lubricant.

Just recently I had a particularly trying foaling case, and attribute the successful issue largely to this jelly, combined possibly with a long reach. Also among the smaller animals, this jelly is most useful as a suppository, in canker of the ears, and for rectal exploration. The firm that supply this preparation are Messrs. Johnson & Johnson, of Slough.

In addressing this to you, I am thinking solely of the value of this to the profession, and not of the firm who supply it, in which I have no interest whatever, beyond wishing them well.—Yours faithfully, F. E. Heath.

34 London Road,
Stevenage,
Herts,
19*th May*, 1928.

The Editor acknowledges the receipt of the following:

Communications from Dr. Tom Hare and Mr. H. L. Roberts.

Dr. Juan E. Richelet's "L'Argentine et les pays consommateurs de viandes frigorifiées."

Waite's

ANTISEPTIC
LOCAL ANAESTHETIC

IS SAFEST—SUREST.

Read "LOCAL ANÆSTHESIA IN VETERINARY PRACTICE,"

an instructive report of Operations on Animals by Dr. L. A. Merillat, President of American Veterinary Medical Association. Reprinted from the "North American Veterinarian."

Free by post.

Ask us also for particulars of WAITE'S Local Anæsthetic, and illustrated list of special Syringes.

Sole Agents:

THE DENTAL MANUFACTURING COMPANY LIMITED,

ALSTON HOUSE, 17 NEWMAN ST., LONDON, W.1.

"VISCAN" IS THE BEST FOOD FOR ALL DOGS.

PURITY & EXCELLENCE

Proprietors and Manufacturers:

WALKER, HARRISON & GARTHWAITES, LTD.,

LONDON, E. 14.

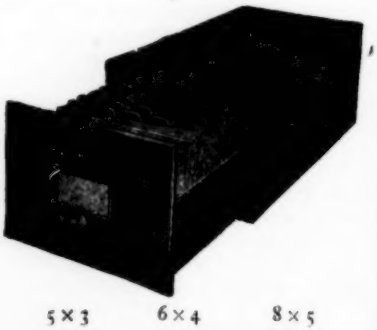
Cheaper than Solid Oak

but looking as good,
our new series of

Card Index Cabinets

will interest you.

Made of pine, polished front (oak shade), body covered brown cloth to match, fitted follower block and retaining stop and brass label-holder and drawer pull.



Size	5×3	6×4	8×5
1 drawer	10/9	13/6	15/9

Also stocked in 2 and 4 drawers in all three sizes.

HUDSON & SON,
STATIONERY DEPARTMENT,
CORNER EDMUND ST. AND LIVERY ST., BIRMINGHAM.

Journal of the American Veterinary Medical Association,

formerly

AMERICAN VETERINARY REVIEW
(Original Official Organ U.S. Vet. Med. Assn.).
Established 1877.

Edited and Published for the

American Veterinary Medical Association
(H. PRESTON HOSKINS, *Secretary-Editor*).

716 Book Building, Detroit, Mich., U.S.A.

Price £1 1s. 0d. per annum,
POST FREE.

Subscriptions to N.V.M.A., 10 Gray's Inn Square, W.C.1., or direct to the publishers.